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5 CLAIMS

I Claim:

A method for determining the performance of a portion of a network, the method
comprising:

Transmitting a test packet from a tester onto a portion of the network;

Receiving the packet at the CMTS;

The CMTS discarding packets with errors;

The CMTS returning packets that do not have errors to the tester;

Not discarding packets in the tester with errors; and

Identifying the packet as a test packet.

- 2. The method in Claim 1 further comprising the step of determining the performance of the upstream portion of the network using all packets determined to be test packets including those that would have been discarded due to errors in the downstream.
- 20 3. The method in Claim 2 where the performance test results is Block Error Rate.
 - 4. The method in Claim 2 where the performance test results is Lost Packets.
 - 5. The method in Claim 1 wherein the network is a cable network.
 - 6. The method in Claim 5 wherein the transmitting step transmits the signal in the upstream channel.
- 7. The method in Claim 6 wherein the signal is returned in the forward channel of the cable network.
 - 8. The method in Claim 6 wherein the destination is the Cable Modern Termination System.
- 9. The method in Claim 2 wherein the process to check for errors is Cyclic Redundancy30 Check (CRC).
 - 10. The method of Claim 1 wherein the method repeats.
 - 11. The method in Claim 1 where the test packet contains a pattern that repeats throughout the packet.
 - 12. The method in Claim 2 where the packets are determined to be test packets by identifying a portion of a repeating test pattern.

- 5 13. The method in Claim 2 where errors in part of the packet are ignored if other portions of the packet contain the repeating test pattern.
 - 14. The method in Claim 2 where the packet size is counted to determine if the packet is the size of a test packet.
 - 15. The method in Claim 2 where all packets are not discarded if they contain errors.